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# Application No. Applicant(s) 10/664,306 BROOKER, DWIGHT E. Notice of Allowability Examiner Art Unit 3749 Alfred Basichas -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to application filed 9/16/03. 2. The allowed claim(s) is/are 10-15. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. \_\_\_ 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date \_\_\_ (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 5. Notice of Informal Patent Application (PTO-152) 1. Notice of References Cited (PTO-892) 6. T Interview Summary (PTO-413). 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Paper No./Mail Date 7. X Examiner's Amendment/Comment 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08). Paper No./Mail Date 9/16/03 8. X Examiner's Statement of Reasons for Allowance 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material 9. 🗌 Other \_\_\_\_

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### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 12, 12<sup>th</sup> and 13<sup>th</sup> lines, the term "the adjacent" has been deleted to avoid antecedent basis issues.

In claim 12, 22<sup>nd</sup> and 23<sup>rd</sup> lines, the term "the adjacent" has been deleted to avoid antecedent basis issues.

In claim 12, 9<sup>th</sup> line, the term "the adjacent" has been deleted to avoid antecedent basis issues.

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## **REASONS FOR ALLOWANCE**

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2. The following is an examiner's statement of reasons for allowance:

Applicant claims, among other things, a combination of a detonation flame arrestor with a reflection suppressor including in combination a housing having opposite housing ends with an orifice defined at each opposite end, a mid-region having opposite mid-region ends, each mid-region end being defined by a transversely extending apertured wall member, a matrix of elements disposed in the mid-region, which define small channels that extend longitudinally therethrough, a pair of opposite end regions in the housing, each end region being located between a different one of the orifices and the matrix of elements, a reflection suppressor having side wall portions that extend between a base portion and an apex portion thereof, a length that is shorter than the distance between the orifice and the matrix of elements in a selected one of the opposite end portions, a cross-sectional area along the length between the base portion and the apex portion that generally declines with increasing distance from the base portion, and the base portion having a cross-sectional area that is less than the cross sectional area of the selected one opposite end region, mounting means for mounting the reflection suppressor in one of the opposite end regions with the reflection suppressor being centrally positioned in the one opposite end regions with

the base portion being located adjacent to the orifice at the one opposite end region, whereby an advancing flame front with an associated pressure wave can enter the opposed one of the orifices, the flame of the flame front can be suppressed in the mid-region, the pressure wave can pass through the mid-region and around the reflection suppressor and out the orifice, and whereby a reflection wave that propagates back to the orifice strikes the reflection suppressor and is attenuated thereby.

#### **Prior Art**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited prior art all disclose flame arrestors reflecting the general background of the art. Brooker is a patent resulting from the parent of the instant application and does not pose double patenting issues. Nevertheless, the prior art of record, taken alone or in combination therewith, does not disclose nor make obvious the combination as claimed by applicant.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 571 272

4871. The examiner can normally be reached on Monday through Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on 571 272 4828. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center telephone number is 571 272 3700.

January 11, 2006

Alfred Basichas Primary Examiner